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IN THE CLAIMS:

What is claimed is:

5 1. (Currently Amended) An electronic thermometer comprising:

an interchangeable, removable module having a temperature probe, said temperature probe having at least one thermistor adapted to be heated by a patient for generating a signal representative of the temperature of the patient, said removable module further having a memory storing predetermined calibration information specific to the at least one thermistor at the time of manufacture and for use by a portable temperature calculating unit, a temperature probe storage chamber and a probe cover storage chamber storing a supply of clean disposable covers corresponding to the temperature probe, wherein said memory stores calibration information; and

a the portable temperature calculating unit adapted for receiving the removable module and removably mating to said removable module, said temperature calculating unit being responsive to the predetermined calibration information for calibrating the at least one thermistor in the temperature probe of the removable module mated therewith and further responsive to the calibrated at least one thermistor signal for providing a measurement for the temperature of the patient.

2. (Canceled)

3. (Currently Amended) An electronic thermometer according to claim 1 wherein said memory is capable of

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electrical communication with said temperature calculating unit when said removable module is installed mated to said temperature calculating unit.

5 4. (Currently Amended) An electronic thermometer according to claim 1 wherein said predetermined calibration information includes at least two calibration reference point parameters wherein each of said at least two calibration reference point parameters are taken at different temperatures
10. during manufacture of said removable module.

5. (Currently Amended) A method of preventing contamination of a removable temperature probe removably mated to a portable temperature calculating base unit in an electronic thermometer comprising the steps of:

storing probe-identifying information specific to said removable temperature probe in a memory chip at the time of manufacture;

connecting said memory chip to said temperature probe;

20. storing said temperature probe in a removable module;

~~storing a supply of clean disposable temperature probe covers in said removable module;~~

removably connecting said removable module to a portable temperature calculating unit; and

25. communicating said probe-identifying information from said memory chip to said portable temperature calculating unit; and
detecting, by calibrating said temperature calculating unit, the type of removable module mated to said temperature calculating unit, wherein detecting said removable module is based on the probe-identifying information stored in the memory chip.

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6. - 7. (Canceled)

8. (Previously Presented) An electronic thermometer according to claim 1 wherein said memory is a 256 bit, 1-wire, 5 parasite-power, EEPROM.

9. (Previously Presented) An electronic thermometer according to claim 1 wherein said removable module includes means for storing probe-specific algorithm parameters.

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10. (Canceled)

11. (Previously Presented) An electronic thermometer according to claim 1 wherein said memory is incorporated in a 15 probe assembly of said removable module.

12. (Canceled)

13. (Previously Presented) An electronic thermometer 20 according to claim 11 wherein said memory is disposed in a connector portion of a probe cable assembly of said removable module.

14. (Previously Presented) An electronic thermometer 25 according to claim 1 wherein said removable module includes a probe assembly incorporated therewith, said probe assembly comprising a temperature probe, an electrical cable and a first connector component, and wherein said first connector component includes fluid resistant mating terminals providing electrical 30 connections to said probe and said memory wherein said memory is incorporated within said probe assembly.

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15. (Canceled)

16. (Previously Presented) An electronic thermometer according to claim 14 wherein said temperature calculating unit 5 includes a header assembly incorporated therewith, said header assembly including header terminals in electrical connection with a microprocessor system, said header assembly mateable with said first connector component of said removable module.

10 17. (Canceled)

18. (Previously Presented) An electronic thermometer according to claim 14 wherein said probe includes at least one thermistor electrically connected with said terminals, and 15 wherein said calibration information includes resistance values of each of said at least one thermistor, said resistance values corresponding to at least two different reference temperatures.

19. (Previously Presented) An electronic thermometer 20 according to claim 14 wherein said memory stores temperature probe identifying information.

20., 22. - 28. (Canceled)

25 21. An electronic thermometer according to claim 5 20 wherein a unique identification number is a pre-programmed and validated EEPROM registration number.

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Response to Non-Final Office Action dated Sept. 21, 2005

Applicant amended independent claims 1 and 5, and dependent claims 3, 4, and 6. Applicant canceled claims 2, 6-7, 10, 12, 5 15, 17, 20, and 22-28 without prejudice.

The amended independent claims recite, in part, an interchangeable, removable module containing memory with predetermined calibration information, the module is removable from a portable temperature calculating unit capable of using the stored parameters to calculate a patient's temperature. The portable temperature unit calibrates itself based on the predetermined calibration information stored in the memory of the interchangeable temperature probe adapter, at the time of manufacture of the adapter.

In your paragraph 2, 35 U.S.C. 103(a) rejection over U.S. Patent 4,008,614 Turner in view of U.S. Pat. No. 5,720,293 Quinn, Turner '614 does not teach or disclose storing the calibration parameter(s) of the at least one thermistor in memory located in the temperature probe. See Yerlikaya at paragraph [0074]. Turner is teaching replacing a temperature probe to avoid cross contamination. See Turner '614 at col. 4, lines 56-67.

Furthermore, there is no suggestion or motivation to modify Turner '614 with Quinn '293. Quinn '293 does not teach or disclose a portable temperature calculating unit capable of providing a temperature measurement from a patient, in contrast Quinn '293 teaches and discloses an external processing computer, called the cardiac computer that can be connected to memory associated with a catheter device. See Quinn '293 at

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col. 4, lines 36-46; col. 9, lines 6-11. The Examiner has not provided any evidence of the existence of a portable temperature calculating unit with predetermined thermistor parameter for automatic calibration, as disclosed in the present invention,
5 was available at the time of the invention for combination with Turner '614 invention. See Yerlikaya at paragraphs [0060; 0067].

10 It is well settled that claims are unpatentable if the differences between them and the prior are "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (Supp. 1998); See Graham v. John Deere Co., 383 U.S. 1, 14, 148 USPQ 459, 465 (1966).

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The phrase "at the time the invention was made" guards against entry into the "tempting but forbidden zone of hindsight when analyzing the patentability of claims pursuant to that section." In re Dembiczak, 50 USPQ2d 1614, 1616 (Fed. Cir. 20 1999) citing Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 873, 228 USPQ 90, 98 (Fed. Cir. 1985), overruled on other grounds by Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 46 USPQ2d 1097 (Fed. Cir. 1998).

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The Court of Appeals for the Federal Circuit has held that "the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirements for a showing of the teaching or motivation to combine prior art references." Id. at 1617. Presently, the 30 Examiner has not shown a rigorous application of the requirements for showing a motivation to combine the references.

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The reason one of ordinary skill in the art would have motivated to select the references and combine them must be specifically identified. Id. citing In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). Presently, the Examiner has not 5 provided any motivation to select the particular references.

"Evidence of teaching or suggestion is "essential" to avoid hindsight." Id. citing In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). "Combining prior art references without evidence of 10 such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability - the essence of Hindsight." Id. The Examiner's has not stated a motivation to combine, but in hindsight suggests that the motivation for the combination is 15 obvious to one having ordinary skill in the art at the time the invention was made. See Office Action at paragraph 2. Without more from the Examiner, the Applicant respectfully concludes the amended claims are in a condition of allowance.

20 The Court of Appeals for the Federal Circuit has held that even though "evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or in some cases, from the nature of the problem to be solved, ... the 25 suggestion more often than not comes from the teachings of the pertinent references ... the range of sources available, however, does not diminish the requirement for actual evidence, that is, the showing must be clear and particular...Broad conclusory statements regarding the teaching of multiple references, 30 standing alone, are not "evidence." Id.

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Turner '614 merely teaches a removable module to prevent cross contamination of probe adapters (as stated in the Examiners section 2, second to last paragraph), not an interchange of probe adapters with a temperature calculating unit, wherein the temperature calculation unit through software calibrates based on the predetermined calibration information contained, at the time of manufacture, in the memory chip in the adapter. There is no motivation in either reference. Quinn '239 is not teaching or disclosing a portable temperature calculating base unit and is not teaching the interchangeable temperature probe adapter to determine a patient's temperature.

Turner '614 is concerned with cross contamination and nowhere does Turner '614 suggest or disclose errors in temperature measurement that are inherent when changing probe adapters as remedied by the present invention.

For claims 8 and 21, the EEPROM is a single wire device not requiring separate power. The EEPROM communicates with the microprocessor of the temperature calculating unit, that is, the microprocessor reads a unique code and the predetermined calibration parameters pre-stored in the 256 bit data memory of the chip. There is no clocking signal between the microprocessor and chip needed to read the registration ID etched thereon and the predetermined calibration parameters stored in the data memory. See Yerlikaya at paragraphs [0069, 0070, and Figure 6A] and data sheet for DS2430A 256 bit One Wire EEPROM. In contrast, Quinn '293 requires a clock signal (CS) at element 102 of FIG 1. See Quinn '293 at FIGURE 1.

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Amended claim 5 is a method of preventing contamination including detecting the type removable module mated to a

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portable temperature calculating unit. For example, Yerlikaya teaches the temperature calculating unit 200 reads the identity of the oral/axillary type probe 161 and displays an associated icon 283 within a window 282. This icon 283 indicates to the 5 user the thermometer is ready to use for a particular mode - namely, oral, axially, or rectal. See Yerlikaya at paragraphs [0061-0062].

The Applicant respectfully requests allowance of the 10 independent claims 1 and 5 and the dependent claims depending therefrom based on the amended claims to a portable temperature calculating base having an interchangeable removable module with a temperature probe adapter and memory therein, storing predetermined calibration parameters for the at least one 15 thermistor.

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Applicant respectfully requests an Examiner interview, if the above amendments do not place this application in a condition of allowance. Applicant authorizes the Commissioner of Patents to charge deposit account 500726 for any late fees or charges necessary to avoid abandonment. I can be reached direct at (508) 261-8476 or Edward.jarmolowicz@tycohealthcare.com.

Respectfully yours,

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